

REMARKS

The Examiner has rejected claims 1-8 under 35 USC §102(b) as being anticipated by Zehr '135. Zehr '135 is a hammermill design invented by Melvin A. Zehr, the founder of Diamond Z Manufacturing, and the inventor of the present invention. The Examiner cites Zehr '135 as anticipating the current invention.

Zehr '135 is a hammermill with a cylindrical tub (30). Tub (30) has a non-rotatable floor (32) and a rotatable annual side wall (35). Col. 3, lines 3-6. The side wall (35) may also have attached a "funnel shaped annulus 48 adjacent to the top, to protect underlying equipment from material being placed into the tub and for increasing the capacity of the tub." Col. 3, lines 44-48. As shown in Figs. 9 and 10, the funnel shaped annulus (48) is attached to and is part of the side wall (35) of the cylindrical tub (30). In Zehr '135, this entire unit rotates around a stationary floor, in which is an opening exposing a hammermill.

The present invention has a structure that appears to be similar to the annulus (48) of Zehr '135. The difference is the funnel shaped annulus (48) of Zehr '135 is attached to and rotates with the side wall (35). The frustoconical stationary cone 22 of the present invention is separate from the rotating side wall 32, and remains stationary while the side wall 32 rotates.

The stationary nature of the cone 22 in the present invention results in improved feed characteristics for the hammermill. When a hammermill is constructed as in Zehr '135, a large mass of material can be deposited inside the side wall (35). Invariably, some of this material extends beyond the annulus (48), and may hang over the side. In an application such as grinding refuse in a landfill, a large amount of flexible material may hang over the side walls of such a grinder. These flexible materials can be strands of videotape, rope, fibers, twine, strips of tree bark, branches, or various other types of debris. As a tub such as that of Zehr '135 rotates, all of

this debris hanging over the annulus (48) rotates around and around until it eventually is ground through the hammermill. However, there is nothing really pulling that material into the drum except gravity. As this material rotates around with the tub, some of it can come into contact with the drive mechanism of the tub. Videotape is a particular problem in this regard, and dangling strips of videotape can become caught in the drive mechanism turning the tub, and foul the chain, gears, or motors that are driving the tub. When this happens, the tub must be stopped and the chain and gears must be freed from the entangling videotape, string, or other material.

In a tub designed as shown in the present invention, with a side wall that rotates surrounded by a stationary cone, with or without a stationary side wall, such dangling material as videotape tends to be wound into the tub. This results in the dangling material having less exposure to the drive mechanism of the tub, and being wound into the tub for grinding. This stationary cone over the rotating tub is not disclosed in Zehr '135, or any of the other prior art.

In Morey '502, the tub (18) has a side wall (19) and an attached funnel shaped top, as shown in Fig. 4. These two form one structure and rotate together.

In Clinton '744, the tub (20) has a flared rim (24), which is attached to the tub side wall, as shown in Fig. 4. Col. 3, lines 59-63. These rotate together.

Worley '784 includes a tub (11) with a tub side (18). It also includes a flared top rim as shown in Fig. 1. These form one unit and rotate together.

The tub of Brand et al. '942 shows a single rotating tub with an attached flared upper structure. This forms one structure and rotates together.

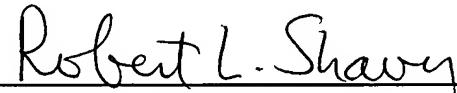
None of these prior art patents show a stationary flared or frustoconical rim above the rotating side wall of the tub. For these reasons, Applicant requests that Examiner reconsider his 35 USC §102 rejection.

For the reasons stated above, Applicant believes that the application is in condition for allowance and respectfully requests the same.

If the Examiner feels it would advance the application to allowance or final rejection, he is invited to telephone the undersigned at the number given below.

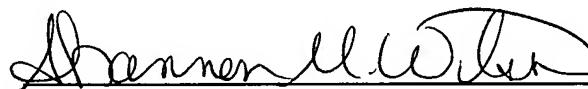
DATED this 10th day of March 2003.

Very respectfully,


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CERTIFICATE OF MAILING

I HEREBY CERTIFY that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, DC 20231, on March 10, 2003.


Shannon M. Wilson